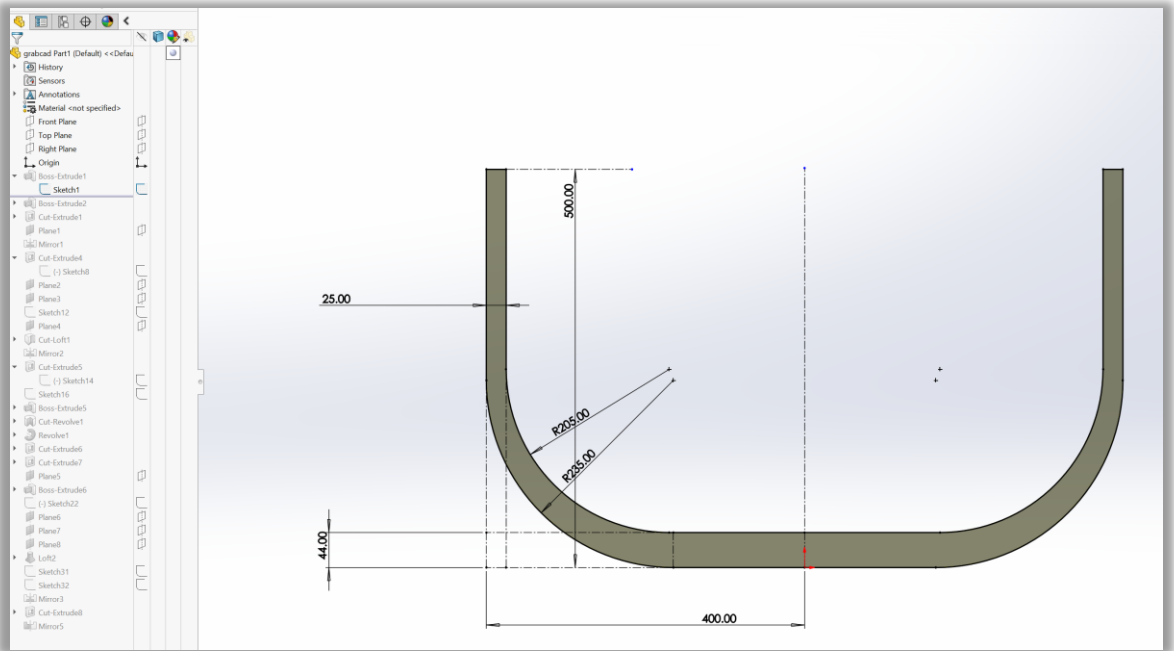
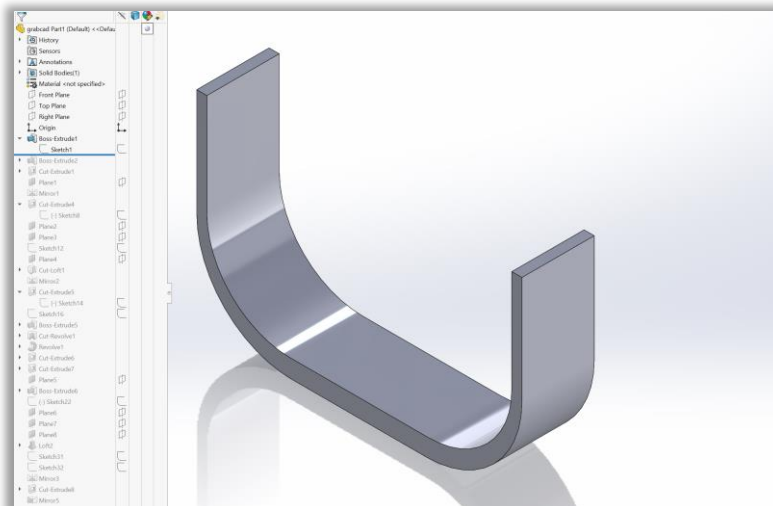


Building the model

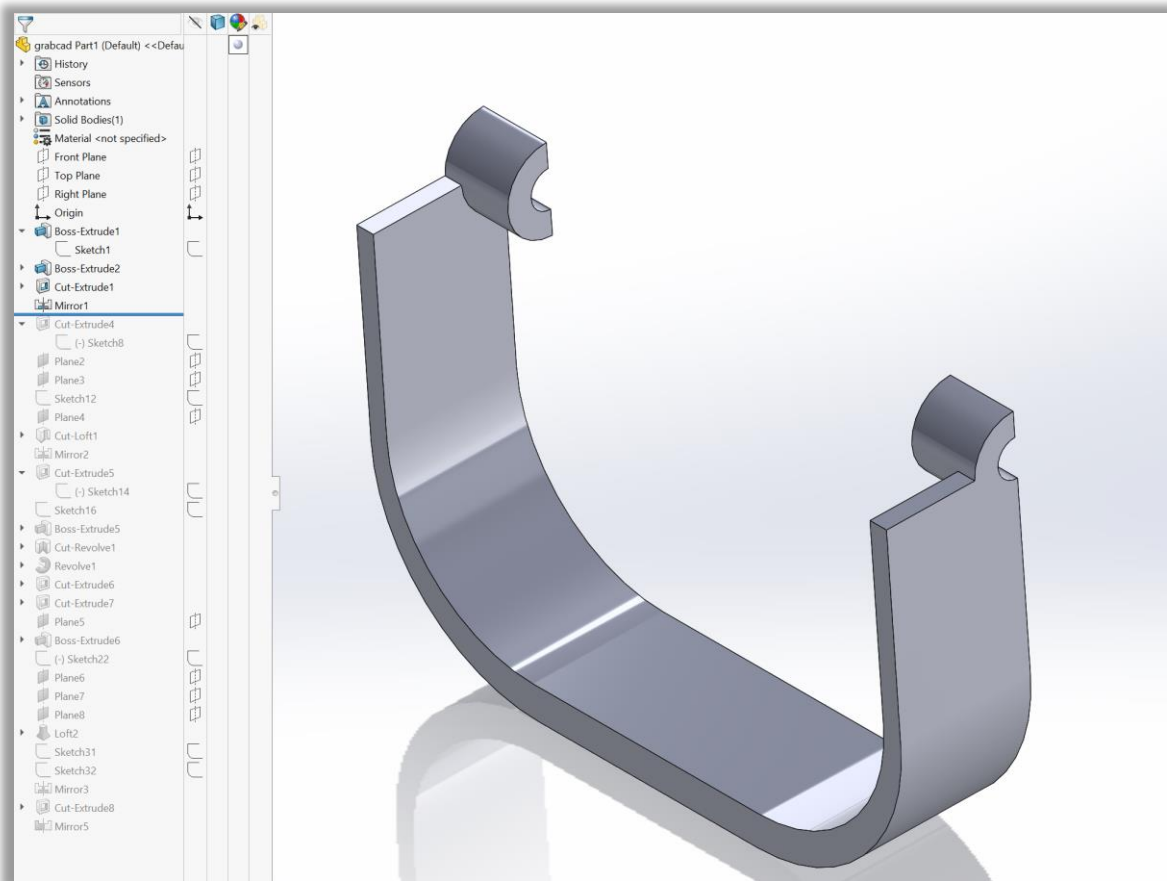
1st Step.



- Make a sketch with dimensions as above with construction lines.
- Draw two circles of dia 285 and 205.
- Make them tangent to horizontal and vertical lines.
- Trim the circles to get to the point as you can see.
- Complete the sketch with solid lines on the left of the center line.
- Mirror all the solid lines about the center line and you will get the full sketch for boss extrude.
- Extrude the sketch by 178. This dimension is not given and I had to find it. I started with extrude of 165 and when I reached the rib, the rib was extended beyond the edge for 55 degree angle. From there I find that if I start with extrude of 178 then rib does not extend beyond the edge.



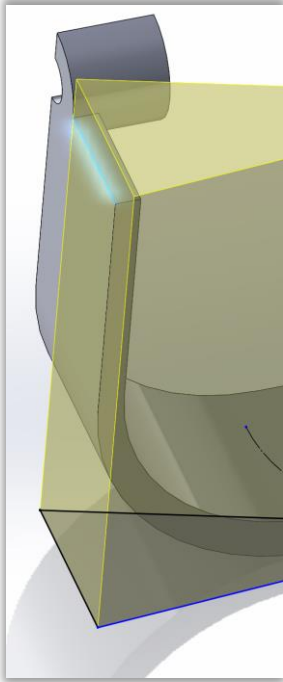
2nd Step.



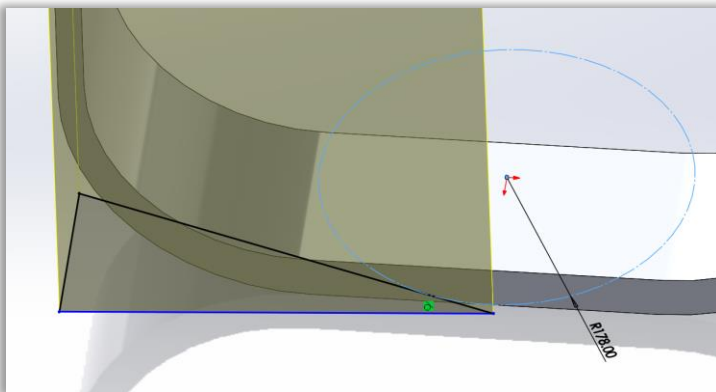
- a. Using boss-extrude, cut-extrude and mirror make the extrudes as shown. All the dimensions are given.

3rd Step.

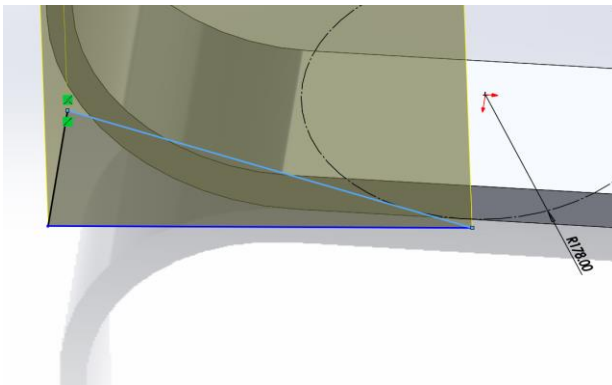
- a. Open a sketch in top plane.
- b. Using “convert entity” draw a line using the blue edge.



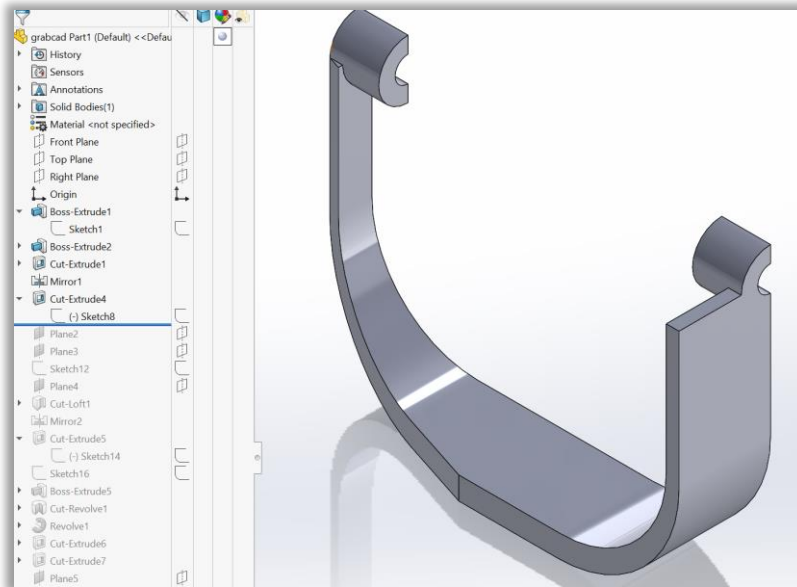
- c. Draw circle of 178 from center as shown



- d. Draw the line tangent to the circle

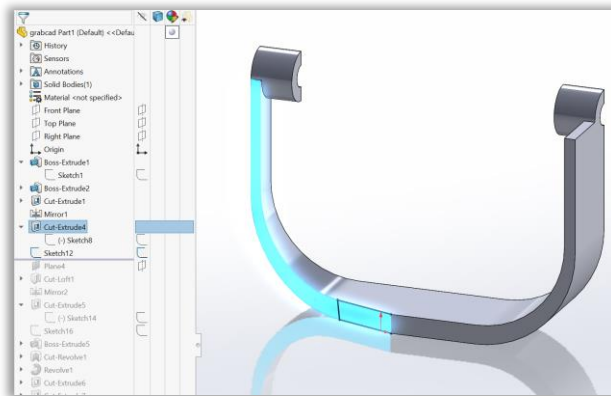


- e. Complete the triangle, use “cut-extrude to get this

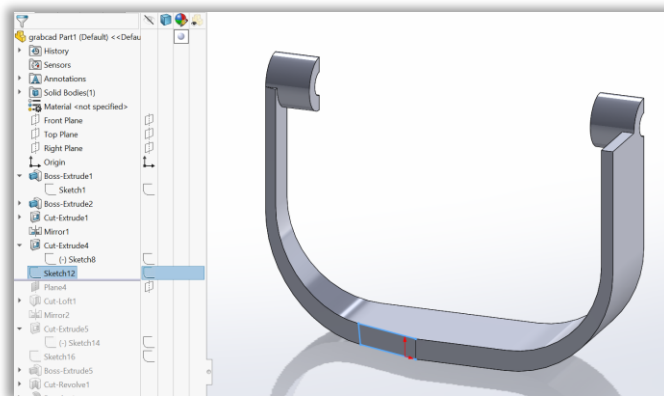


4th Step.

- a. Use the plane as shown to draw a sketch

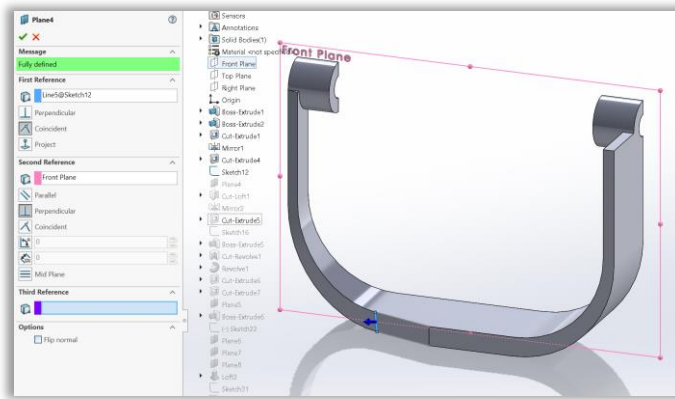


- b. Complete the sketch as shown



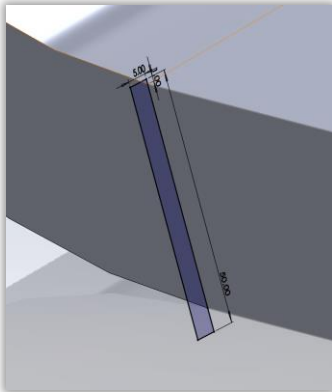
5th Step.

- Insert a plane (plane 4) using a line of previous sketch as shown



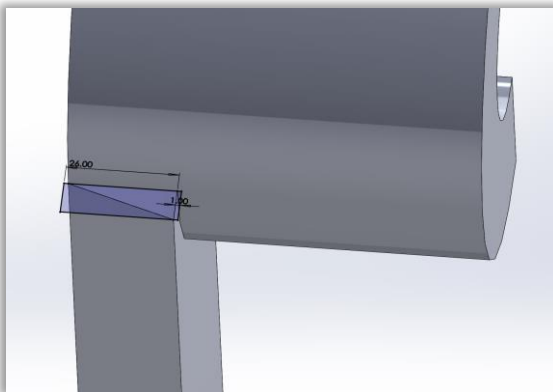
6th Step.

- On plane 4, draw the rectangle with dimension as shown with reference to the line of sketch 12. Use convert entity and the line of sketch 12 to draw the first line and complete the rectangle.



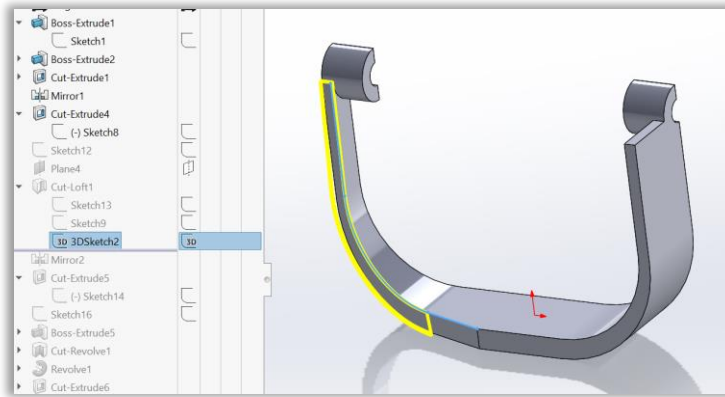
7th Step.

- Use the tiny triangular plane at the top to draw a sketch on that plane as shown



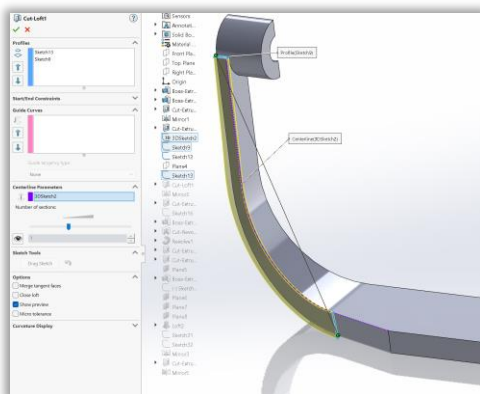
8th Step.

- Draw a 3D sketch using the blue edge as shown

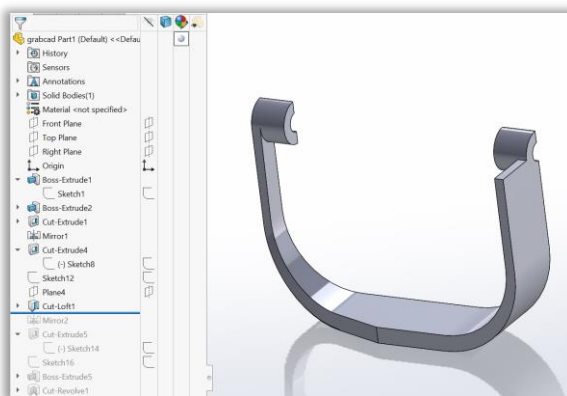


9th Step.

- Execute “cut-loft” using sketch 13, sketch 9 and 3D sketch2 as center line

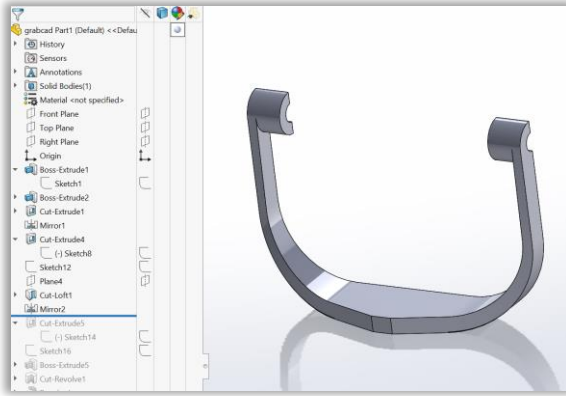


- You will get to this



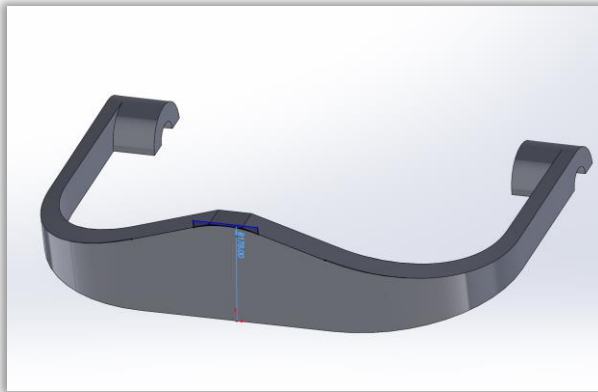
10th Step.

- a. Use mirror command to get this

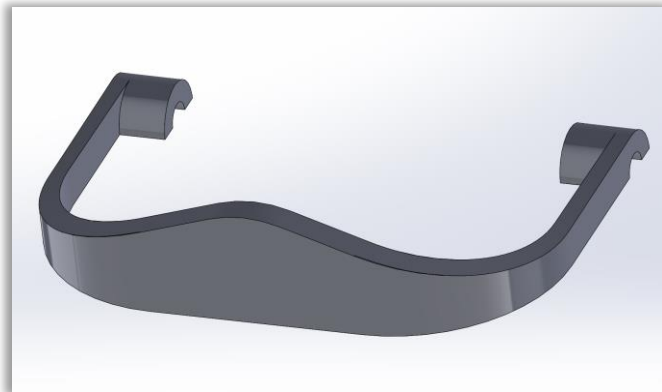
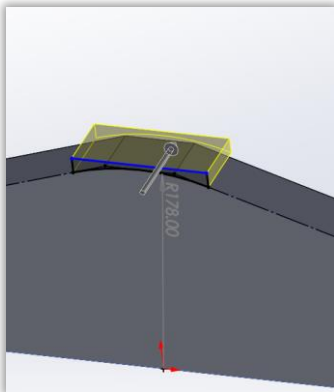


11th Step.

- a. Draw circle Of 178 on the bottom plane from the center, Make that circle tangent to two edge, trim circle at tangent touch point, complete the sketch as shown

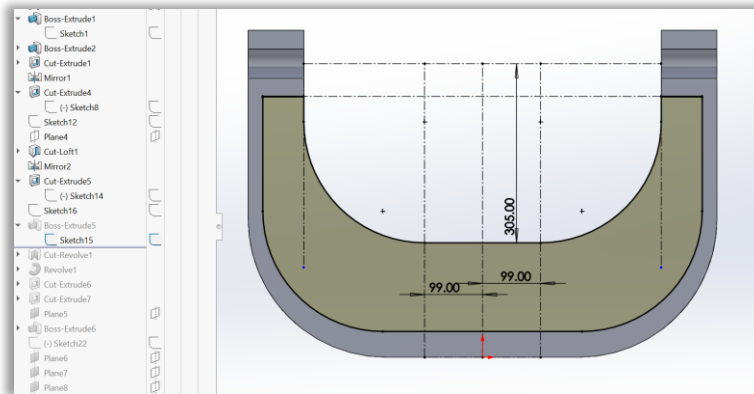


- b. And use cut-extrude to get this

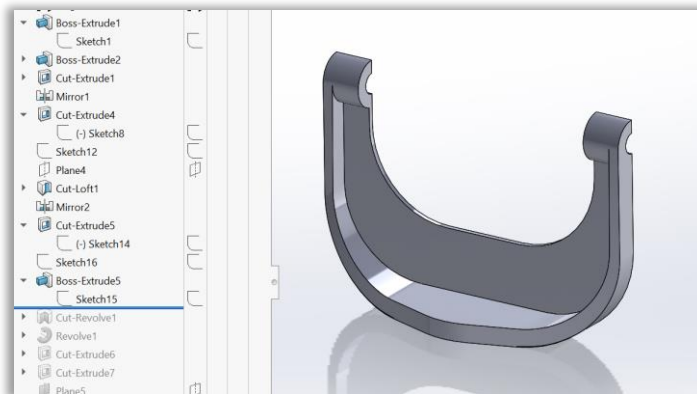


12th Step.

- a. This is the sketch for middle part. I think you will be able to figure how it is done.

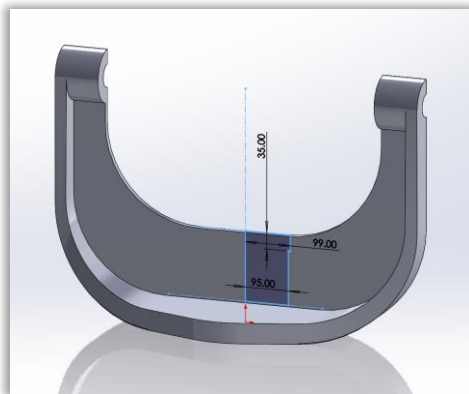


- b. After boss-extrude



13th Step.

- a. Sketch for cut-revolve made on front plane

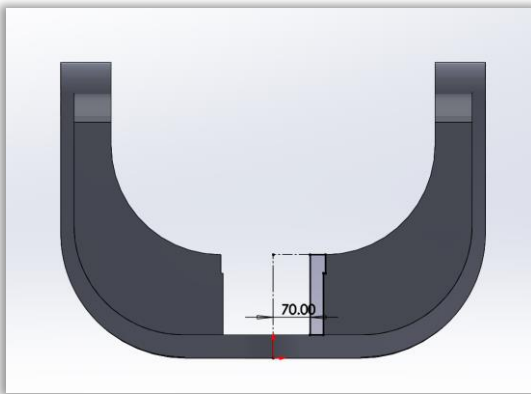


b. Executing cut-revolve

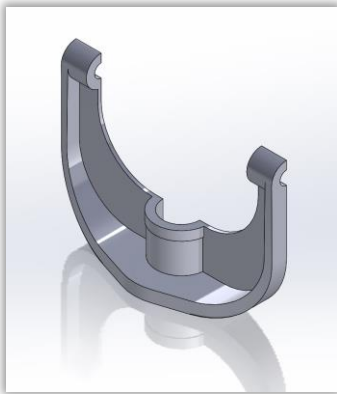


14th Step.

a. Sketch for revolved-boss made on front plane

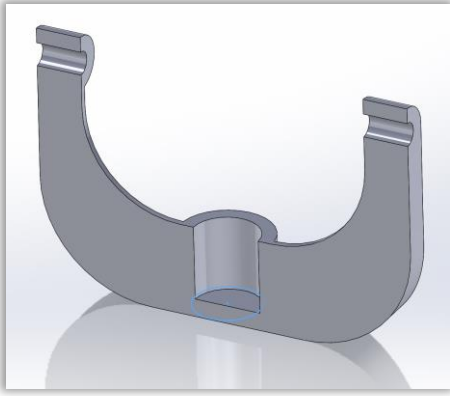


b. Execution of revolved-boss



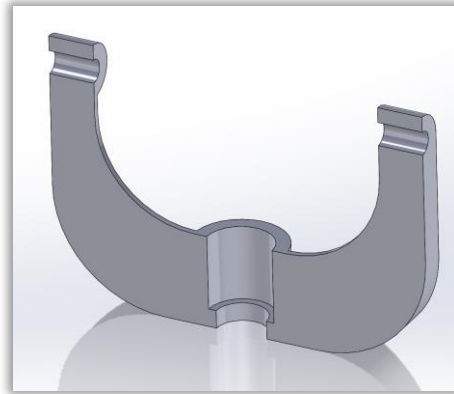
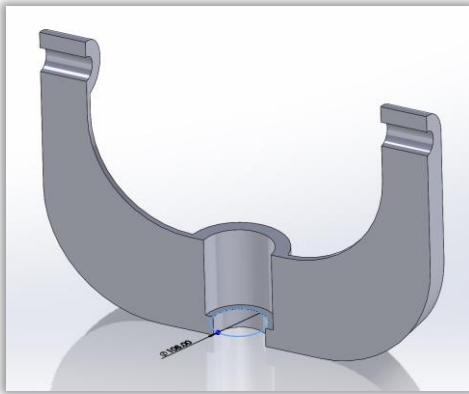
15th Step.

- a. Sketch for 6mm cut-extrude



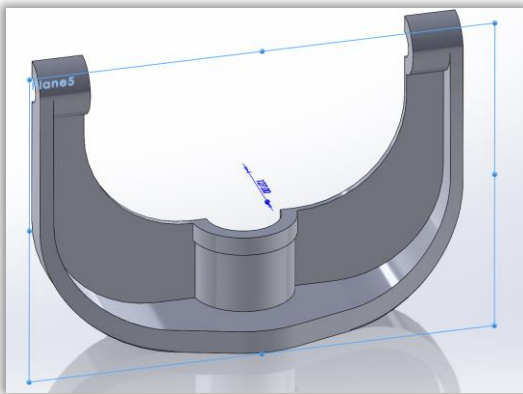
16th Step.

- a. Sketch for cur-extrude and execution

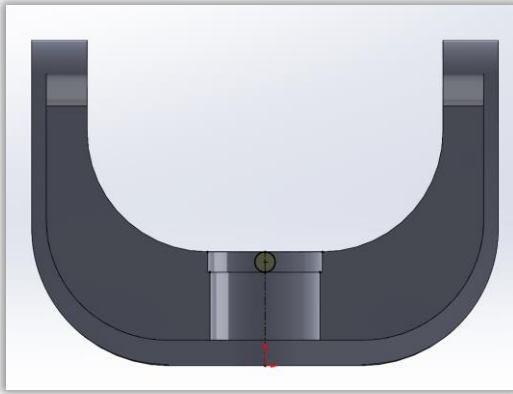


17th Step.

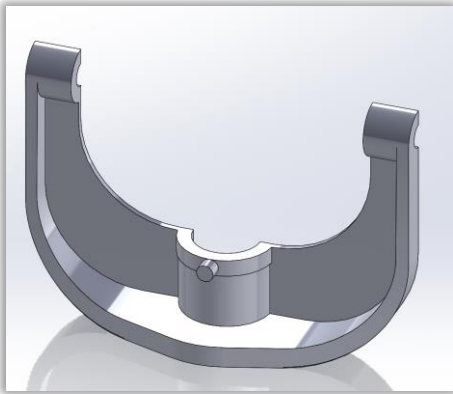
- a. Insert a plane 127mm from front plane



- b. Draw circle on the plane as shown

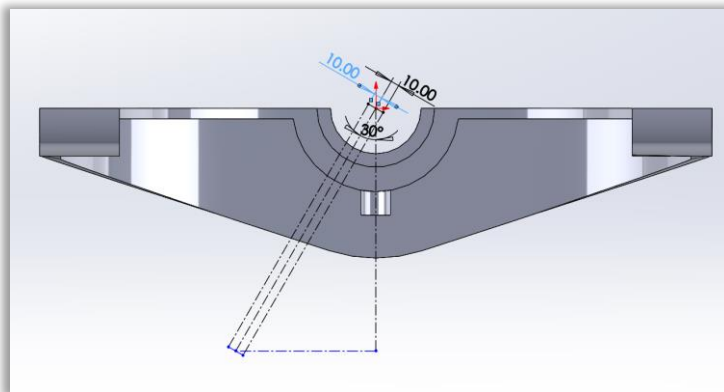


- c. Boss-extrude yield this

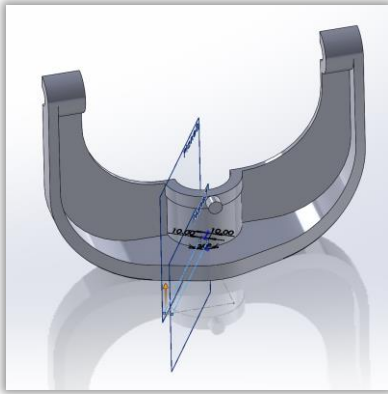


18th Step. Gg

- a. On top plane draw this sketch

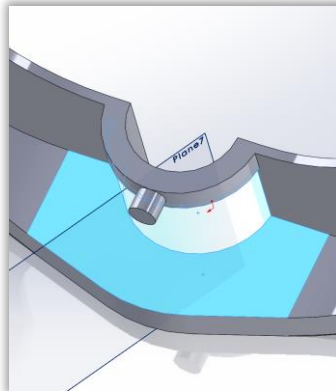
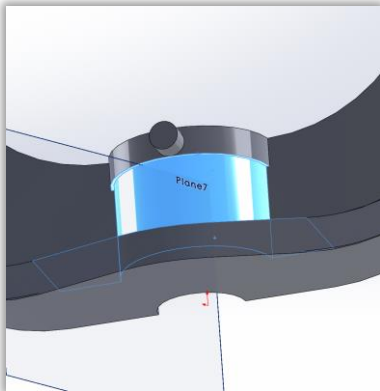


- b. Insert two plane perpendicular to top plane (plane 7 & 8)

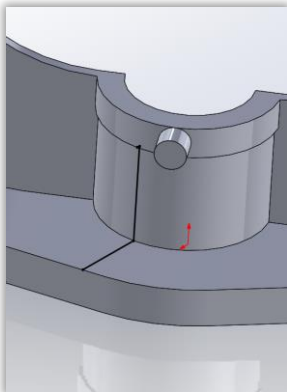


19th Step. Kk

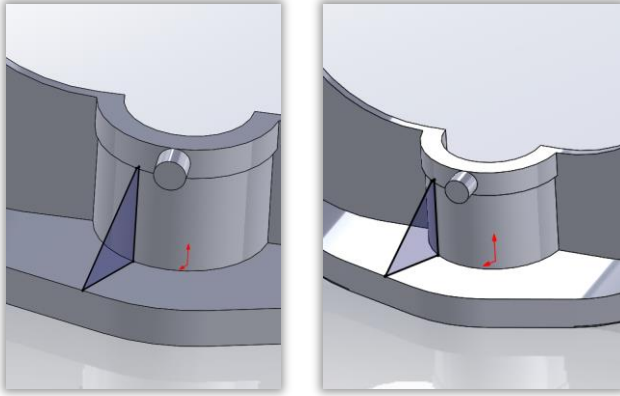
- a. On plane 7, draw intersection curve using the faces as shown



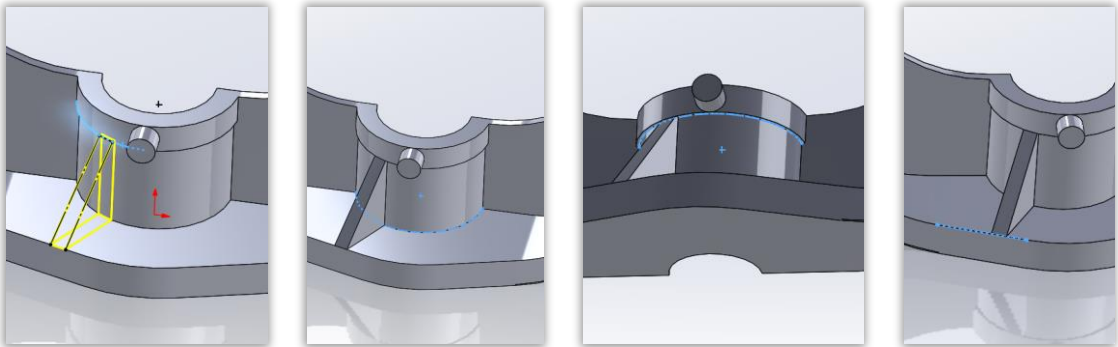
- b. To get a sketch like this



- c. Join the two point to get this. This is sketch 27 of Loft2. In a similar way, use plane 8 to draw similar sketch

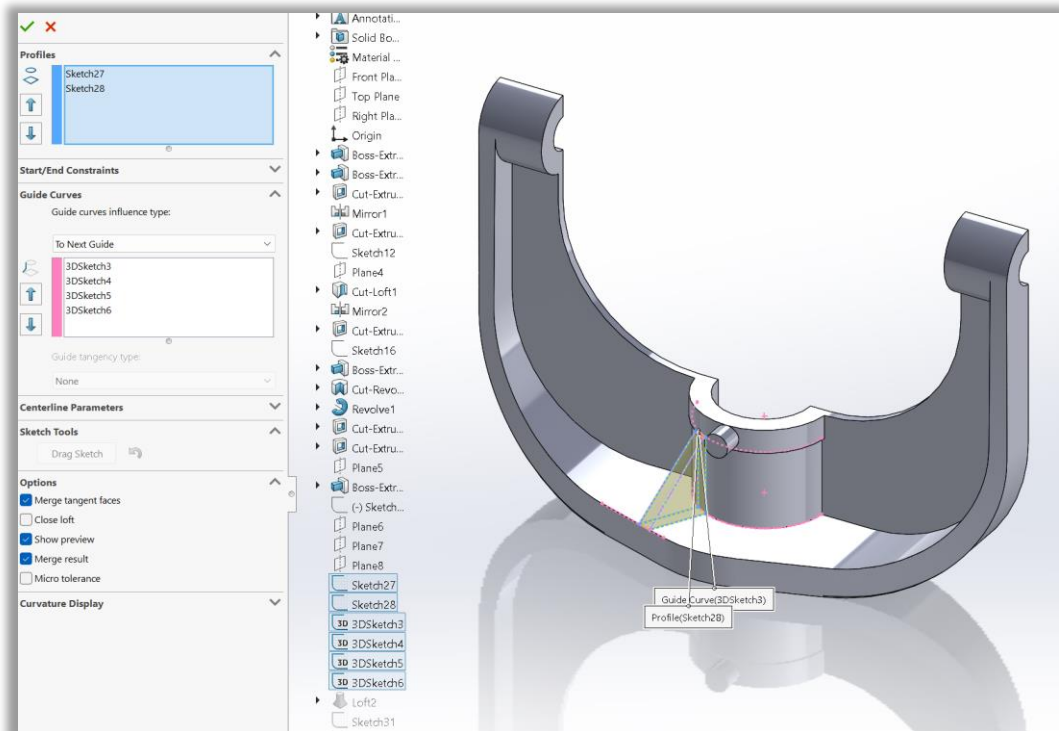


- d. Draw 3D sketch using these blue edges

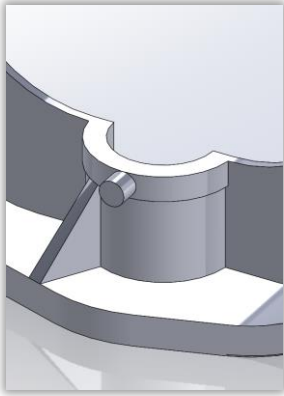


20th Step.

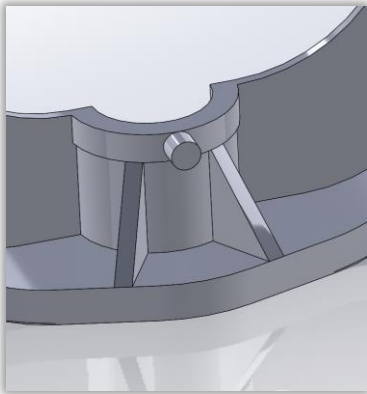
- a. Using lofted boss as shown generate the rib



b. Like this

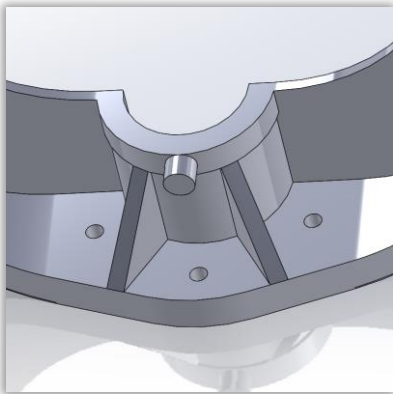


c. Use mirror to get this



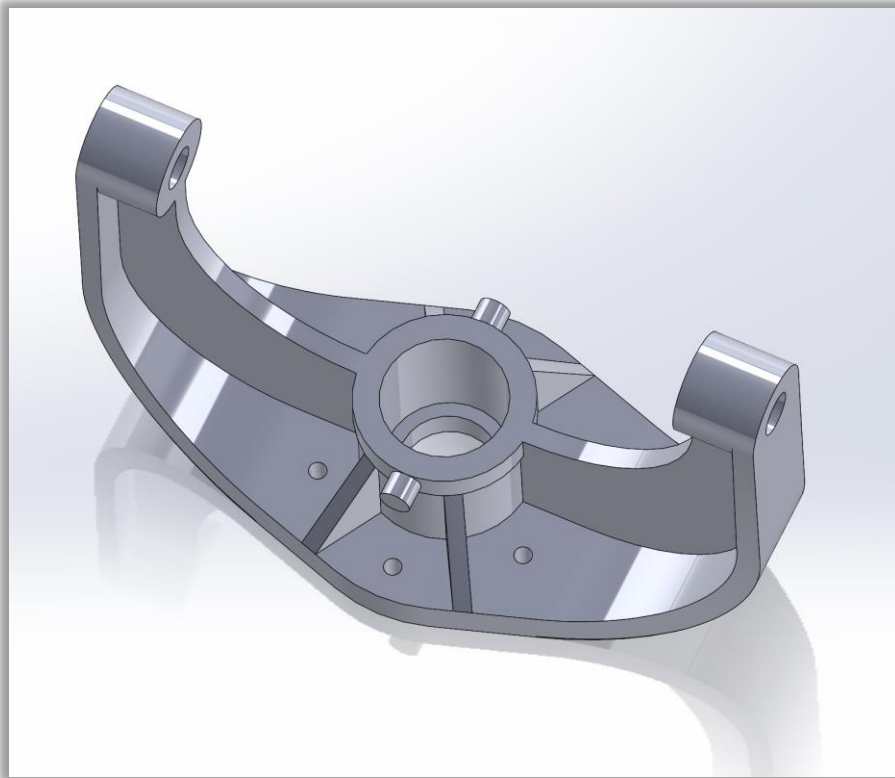
21st Step. Jj

a. Make the holes



22nd Step.

- a. Mirror whole body to get this



23rd Step.

- a. This is the angular measurement of rib, 54.96°

